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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/823,942      | 04/14/2004  | Brian R. Chambers    | 35213US1            | 5278             |

116 7590 09/29/2005

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| EXAMINER |
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BERMAN, SUSAN W

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| ART UNIT | PAPER NUMBER |
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1711

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                                 |  |
|------------------------------|-------------------------------|---------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/823,942 | Applicant(s)<br>CHAMBERS ET AL. |  |
|                              | Examiner<br>Susan W. Berman   | Art Unit<br>1711                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.  
4a) Of the above claim(s) 1-17 and 22-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/04</u> . | 6) <input type="checkbox"/> Other: ____  |

Art Unit: 1711

*Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-21 and 24-28, drawn to a silicone "compound", classified in class 522, subclass 99.
- II. Claims 22-23, drawn to a crosslinked silicone, classified in class 528, subclass 33.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as an electronic potting material or a coating composition and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

This application contains claims directed to the following patentably distinct species of the claimed invention: With respect to Group I, different compositions comprising different species of polysiloxane components are set forth in claim 1, claim 16, claim 18, and claim 26.

Art Unit: 1711

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

During a telephone conversation with Steven Solomon on September 2, 2005, a provisional election was made with traverse to prosecute the invention of Group I and the species of claim 18, claims 18-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-17 and 24-28 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected species. Claims 22-23 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected species invention.

Art Unit: 1711

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear whether applicant intends to claim a compound or a composition. Does applicant intend to claim a compound that is the reaction product of the first and second polysiloxanes? A compound is universally understood to be a single structure and cannot contain two polysiloxanes unless bonded together to form one structure. Does applicant intend to claim a composition comprising a first polysiloxane and a second polysiloxane? If so, it should be so stated.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pigeon (4,290,869) in view of DeCato et al (6,451,870). Pigeon discloses photopolymerizable organopolysiloxane/silane release coating compositions. The organopolysiloxane can have (meth)acryl or mercapto end groups and vinyl and/or alkoxy groups. Oximo groups are not mentioned. Different combinations of the silicone components taught by Pigeon are taught in column 8, lines 1-30.

DeCato et al disclose dual curing silicone compositions. Component (A) is a vinyl-functional alkoxy siloxane. Component (B) is an acrylate-functional alkoxy siloxane that can also have oxime groups

Art Unit: 1711

(column 6, lines 17-44). A photoinitiator and a catalyst are added. DeCato et al teach that it is known that silicones end capped with oximo silanes provide moisture curability (column 1, lines 37-43). DeCato et al teach UV curing and that a secondary cure mode, such as moisture cure, provides shadow curing. Mercapto functional polysiloxanes are not mentioned by De Cato et al.

It would have been obvious to one skilled in the art at the time of the invention to provide compositions comprising an organopolysiloxane having (meth)acryl groups, vinyl groups and alkoxy groups and an organopolyisloxane having mercapto end groups and alkoxy groups, as taught by Pigeon (see column 8, lines 22-30). It would have been obvious to one skilled in the art at the time of the invention to substitute oximo functionality for alkoxy functionality, as suggested by DeCato et al, in the polyorganosiloxane having vinyl functionality taught by Pigeon. DeCato et al teach that oximo functional groups, as well as alkoxy functional groups, provide moisture curability.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chu et al (5,348,986) disclose polymodal-cure photocurable silicone compositions comprising an acryloxy-functional capped silicone. The silicone can also contain additional vinyl functional groups and can be reacted with a hydrogen containing polysiloxane to be cured with a platinum catalyst (column 22, lines 50-57). Chu (5,516,812) discloses compositions comprising a vinyl silicone and second silicone having radiation curable and moisture curable groups. Chu (5,498,642) discloses that vinyl dialkoxy terminated polydimethylsilicone provides UV and moisture curing and results in better surface skinning during UV exposure. Chu (5,179,134) discloses acryloxy functional siloxanes having moisture curable groups.

Art Unit: 1711

Bokerman et al (4,052,529) disclose radiation curable mixture of a mercaptoalkyl endblocked polydiorganosiloxane and a methylvinyl-polysiloxane. A photoinitiator is added and exposure to radiation results in a coated substrate that provides premium release of aggressive acrylic adhesives.

Lee et al (4,946,874) disclose UV curing silicone compositions containing two vinyl polymers. An alkenyl-, such as vinyl, containing polydiorganosiloxane and a mercapto-functional polyorganosiloxane and a photosensitizer are in the compositions. Tensile strengths in MPa and percent elongation are reported for the Examples. Lee et al (4,572,918) disclose mercapto organosiloxane compositions wherein the mercapto-functional siloxane can have alkoxy groups. Vinyl-functional siloxanes and photoinitiators are not mentioned.

Bennington et al (4,526,955) disclose radiation polymerizable compositions comprising organopolysiloxanes and a photoinitiator. The compositions comprise an organopolysiloxane having reactive groups and groups such as vinyl groups, and an oxime-containing organosilicon compound.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W Berman whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571 273-8300.

Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SB  
9/24/2005



Susan W Berman  
Primary Examiner  
Art Unit 1711